

Facility Name: FMC Pocatello  
Facility Address: Box 4111, Pocatello ID 83202  
Facility EPA ID #: IDD 070929518

**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**

Revised September 1, 2004

**RCRA Corrective Action  
Environmental Indicator (EI) RCRIS code (CA725)**

**Current Human Exposures Under Control**

1. Has **all** available relevant/significant information on known and **reasonably suspected** releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

  X   If yes - check here and continue with #2 below.

       If no - re-evaluate existing data, or

       if data are not available skip to #6 and enter "IN" (more information needed) status code.

**BACKGROUND**

**Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

**Definition of "Current Human Exposures Under Control" EI**

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

**Relationship of EI to Final Remedies**

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

**Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be "**contaminated**"<sup>1</sup> above appropriately protective risk-based "levels" (applicable promulgated standards, as **Current** well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective

Action (from SWMUs, RUs or AOCs)?

**RCRA Corrective Action  
Environmental Indicator (EI) RCRIS code (CA725)**

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale / Key Contaminants</u>
Groundwater	<u>X</u>	___	___	<u>&gt;MCL - Arsenic /Antimony/Fluoride/Manganese and</u> <u>Phosphorus standard see SF ROD.</u>
Air (indoors) <sup>2</sup>	___	<u>X</u>	___	
Surface Soil (e.g., <2 ft)	<u>X</u>	___	___	<u>Calcliner pond solids (SF has proposed capping but</u> <u>remedy has not been implemented. Soils on off-site area are</u> <u>contaminated from facility deposition.</u>
Surface Water	<u>X</u>	___	___	<u>Groundwater discharges to surface water. The surface</u> <u>water TMDL for phosphorus is exceeded.</u>
Sediment	___	<u>X</u>	___	
Subsurf. Soil (e.g., >2 ft)	<u>X</u>	___	___	<u>Subsurface soil contamination in pond areas and at</u> <u>depth in many areas of the facility. Soils contaminated with elemental</u> <u>phosphorus, metals.</u>
Air (outdoors)		<u>X</u>	___	<u>A number of activities have been taken to address air</u> <u>releases including: the installation of continuous monitoring of</u> <u>phosphine and hydrogen cyanide using FTIR systems at the</u> <u>RCRA ponds with open water; implementation of work rules</u> <u>and monitoring and response protocols to ensure that workers</u> <u>and the public are not exposed to phosphine and hydrogen</u> <u>cyanide emissions; and installation of temporary covers on a</u> <u>number of RCRA ponds.</u>

\_\_\_ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

\_\_x\_\_ If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

\_\_\_ If unknown (for any media) - skip to #6 and enter "IN" status code.

**Rationale and Reference(s):**

Superfund ROD. The State of Idaho has developed a TMDL for phosphorus for surface water downgradient of the facility. Concentrations of total phosphorus exceed the TMDL. It is believed that contamination in the groundwater is entering the surface water via springs causing these exceedances.

July 31, 2003 update: Contaminants continue to exceed TMDL standards in the surface water. The exact source of the contamination from groundwater to surface water has not yet been quantitatively assessed. However, in May 2003 additional groundwater monitoring wells were installed on the FMC site. The facility intends to sample these wells in August 2003. The source in the area where these wells were installed is being addressed by closing the surface impoundments with caps. EPA is in the process of negotiating an agreement with FMC to further characterize and delineate other sources of contamination to soils and the groundwater.

Notes:

<sup>1</sup> “Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).

<sup>2</sup> Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

3. Are there **complete pathways** between “contamination” (verified or reasonably suspected) and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

#### Summary Exposure Pathway Evaluation Table

##### Potential **Human Receptors** (Under Current Conditions)

<b>“Contaminated” Media</b>	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food <sup>3</sup>
Groundwater	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>No</u>	No	no	<u>No</u>
Air (indoors)	<u>No</u>	<u>No</u>	<u>No</u>	no	No	no	no
Soil (surface, e.g., <2 ft)	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Surface Water	<u>Yes</u>	<u>Yes</u>	No	No	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
Sediment	<u>No</u>	<u>No</u>	no	no	<u>No</u>	<u>No</u>	<u>No</u>
Soil (subsurface e.g., > ft)	No	Yes	no	<u>Yes</u>	Yes	<u>No</u>	No
Air (outdoors)	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	yes	No

**Facility Name:** FMC Pocatello  
**Facility Address:** Box 4111, Pocatello ID 83202  
**Facility EPA ID #:** IDD 070929518

#### **Current Human Exposures Under Control** **Environmental Indicator (EI) RCRIS code (CA725)**

#### Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
2. enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“\_\_\_”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- \_\_\_\_\_ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- X If yes (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.

\_\_\_\_\_ If unknown (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

Rationale and Reference(s): June 14, 2002 The facility has stopped producing elemental phosphorus so emissions from the plant no longer pose a risk to off-site human receptors. The onsite surface impoundments continue to emit phosphine but are monitored and exposures to humans off-site are controlled by evacuation if necessary. There are many on-site sources of contamination that are potential complete pathways for future human exposure. These areas will undergo additional remedial investigation pursuant to an Order EPA is negotiating with the facility.

<sup>3</sup> Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

- 4 Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**<sup>4</sup> (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

  x   If no (exposures can not be reasonably expected to be significant (i.e., potentially “unacceptable”) for any complete exposure pathway) - skip to #6 and enter “YE” status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to “contamination” (identified in #3) are not expected to be “significant.”

\_\_\_\_\_ If yes (exposures could be reasonably expected to be “significant” (i.e., potentially “unacceptable”) for any complete exposure pathway) - continue after providing a description (of each potentially “unacceptable” exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to “contamination” (identified in #3) are not expected to be “Significant.”

\_\_\_\_\_ If unknown (for any complete pathway) - skip to #6 and enter “IN” status code

Rationale and Reference(s): June 14, 2002 - If the RCRA Pond Management Plan is followed to control exposures to emissions from the surface impoundments exposures should not be significant to off-site receptors from air releases from the plant. If appropriate health and safety precautions are made (radiation exposures minimized, phosphine monitors used) exposures will not be unacceptable. FMC controls worker exposures through limiting access to specific work areas, rigorous health and safety training and appropriate health and safety equipment. Under the current use scenario the exposures are not expected to be significant. However, the facility is no longer operational and FMC is in the process of identifying a future use for the site, this is the purpose of additional investigation .

<sup>4</sup> If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

- 5 Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?

  X   If yes (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

\_\_\_\_\_ If no (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.

\_\_\_\_\_ If unknown (for any potentially “unacceptable” exposure) - continue and enter “IN” status code

Rationale and Reference(s): If appropriate health and safety precautions are made (radiation exposures minimized, phosphine monitors used) exposures will not be unacceptable. FMC controls worker exposures through limiting access to specific work areas, rigorous health and safety training and appropriate health and safety equipment. Under the current use scenario the exposures are not expected to be significant. However, the facility is no longer operational and FMC is in the process of identifying a future use for the site, this is the purpose of additional investigation .

Facility Name: \_\_\_\_\_ FMC Pocatello  
Facility Address: \_\_\_\_\_ Box 4111, Pocatello ID 83202 \_\_\_\_\_  
Facility EPA ID #: \_\_\_\_\_ IDD 070929518

**Current Human Exposures Under Control  
Environmental Indicator (EI) RCRIS code (CA725)**

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

  x   YE - Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

\_\_\_\_\_ NO - "Current Human Exposures" are NOT "Under Control."

\_\_\_\_\_ IN - More information is needed to make a determination.

Completed by (signature) Linda Meyer Date 7/31/03  
(print) \_\_\_\_\_  
(title) RCRA Permit Writer

Supervisor (signature) \_\_\_\_\_ Date \_\_\_\_\_  
(print) Rick Albright  
(title) Director, Office of Waste and Chemical Management  
(EPA Region or State) Region 10

Narrative including locations where References may be found:

SF Record of Decision June 1998/ RCRA Consent Decree October 1998  
The SF administrative record can be found in the Idaho State University Library as well as at EPA's offices, 1200 Sixth Avenue, Seattle. In addition to characterization data in the Superfund files, EPA has RCRA files which includes a RCRA Part B permit application. The RI/FS is available at (WEB SITE HERE).  
Contact telephone and e-mail numbers

(name) Linda Meyer  
(phone #) 206-553-6636  
(e-mail) meyer.linda@epa.gov

**FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.**

Facility Name:       FMC Pocatello        
Facility Address:       Box 4111, Pocatello ID 83202        
Facility EPA ID #:       IDD 070929518      

**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**

July 30, 2003

**RCRA Corrective Action  
Environmental Indicator (EI) RCRIS code (CA750)**

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?
- x   If yes - check here and continue with #2 below.  
       If no - re-evaluate existing data, or  
       if data are not available, skip to #8 and enter "IN" (more information needed) status code.

**BACKGROUND**

**Definition of Environmental Indicators (for the RCRA Corrective Action)**

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

**Definition of "Migration of Contaminated Groundwater Under Control" EI**

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

**Relationship of EI to Final Remedies**

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRAs. The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

**Duration / Applicability of EI Determinations**

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be "**contaminated**"<sup>1</sup> above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

  x   If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.  
       If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting  
       If unknown - skip to #8 and enter "IN" status code.  
documentation to demonstrate that groundwater is not "contaminated."

Rationale and Reference(s):            arsenic, antimony, fluoride, manganese, phosphorus - See SF ROD June 1998.

In addition the 1994 Remedial Investigation includes site characterization data.

Notes: <sup>1</sup>“Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate “levels” (appropriate for the protection of the groundwater resource and its beneficial uses).

Facility Name: FMC Pocatello

Facility Address: Box 4111, Pocatello ID 83202

Facility EPA ID #: IDD 070929518

**Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS code (CA750)**

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within “existing area of contaminated groundwater”<sup>2</sup> as defined by the monitoring locations designated at the time of this determination)?

       If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the “existing area of groundwater contamination”<sup>2</sup>).

**X**        If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the “existing area of groundwater contamination”<sup>2</sup>) - skip to #8 and enter “NO” status code, after providing an explanation.

       If unknown - skip to #8 and enter “IN” status code.

Rationale and Reference(s): Groundwater contamination may be spreading down gradient, SF selected No action, for the FMC Operable Unit. The ROD is currently being reevaluated for a number of issues. New information indicates ortho-phosphorus concentrations in the surface water are increasing. The new Arsenic MCL may not be met in well downgradient used for drinking water purposes. July 31, 2003 update: Groundwater discharges to surface water in the area of Batise Springs. Both FMC and the adjacent Simplot facility manufacture phosphorus and have contaminated the aquifer with phosphorus. The surface water in this area currently exceeds the States TMDL standard for phosphorus. It is unclear at this time how much of the contamination in the shallow groundwater which impacts the surface water is a result of sources from the FMC facility and how much contamination is from the adjacent Simplot facility. Once Simplot installs a groundwater extraction system it will be easier to assess the source of the groundwater contamination, plume migration and the need to address the phosphorus in the surface water.

<sup>2</sup> “existing area of contaminated groundwater” is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of “contamination” that can and will be sampled/tested in the future to physically verify that all “contaminated” groundwater remains within this area, and that the further migration of “contaminated” groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does “contaminated” groundwater **discharge** into **surface water** bodies?

       If yes - continue after identifying potentially affected surface water bodies.

       If no - skip to #7 (and enter a “YE” status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater “contamination” does not enter surface water bodies.

       If unknown - skip to #8 and enter “IN” status code.

Rationale and Reference(s):       

5. Is the **discharge** of “contaminated” groundwater into surface water likely to be “**insignificant**” (i.e., the



maximum concentration<sup>3</sup> of each contaminant discharging into surface water is less than 10 times their appropriate groundwater “level,” and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

\_\_\_\_\_ If yes - skip to #7 (and enter “YE” status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration<sup>3</sup> of key contaminants discharged above their groundwater “level,” the value of the appropriate “level(s),” and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

#### **Migration of Contaminated Groundwater Under Control Environmental Indicator (EI) RCRIS code (CA750)**

\_\_\_\_\_ If no - (the discharge of “contaminated” groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration<sup>3</sup> of each contaminant discharged above its groundwater “level,” the value of the appropriate “level(s),” and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations<sup>3</sup> greater than 100 times their appropriate groundwater “levels,” the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

\_\_\_\_\_ If unknown - enter “IN” status code in #8.

Rationale and Reference(s):

<sup>3</sup> As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of “contaminated” groundwater into surface water be shown to be “**currently acceptable**” (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented<sup>4</sup>)?

\_\_\_\_\_ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site’s surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR 2) providing or referencing an interim-assessment,<sup>5</sup> appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment “levels,” as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

\_\_\_\_\_ If no - (the discharge of “contaminated” groundwater can not be shown to be “**currently acceptable**”) - skip to #8 and enter “NO” status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

\_\_\_\_\_ If unknown - skip to 8 and enter “IN” status code.

Rationale and Reference(s): \_\_\_\_\_

<sup>4</sup> Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refuge) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

<sup>5</sup> The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a

**Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS code (CA750)**

rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the “existing area of contaminated groundwater?”

\_\_\_\_\_ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the “existing area of groundwater contamination.”

\_\_\_\_\_ If no - enter “NO” status code in #8.

\_\_\_\_\_ If unknown - enter “IN” status code in #8.

Rationale and Reference(s): \_\_\_\_\_

**Migration of Contaminated Groundwater Under Control  
Environmental Indicator (EI) RCRIS code (CA750)**

**Facility Name:** FMC Pocatello  
**Facility Address:** Box 4111, Pocatello Idaho, 83202  
**Facility EPA ID #:** IDD 07092 9518

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

       YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control". Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

  x   NO - Unacceptable migration of contaminated groundwater is observed or expected.

       IN - More information is needed to make a determination.

Completed by (signature) Linda Meyer Date 8/31/04  
(print)  
(title) RCRA Permits Team

Supervisor (signature) Date \_\_\_\_\_  
(print) Rick Albright  
(title) Director, Office of Air, Waste and Toxics  
(EPA Region or State) Region 10

Narrative and locations where References may be found:

       SF ROD June 1998, RCRA Consent Decree October 1998. Since 1999 when this form was last completed FMC has announced closure of their facility. Facility emissions which historically exceeded their permitted levels are no longer posing a risk to off-site receptors. In Feb 2002 EPA conducted an RFA to assess releases from operating areas. There is still concern of releases from product areas which may be contributing phosphorus load to the groundwater. The facility is in the process of closing a number of surface impoundments which mainly pose a risk due to uncontrolled air releases of phosphine and hydrogen cyanide. The majority of sources should be under control once the Superfund ROD is implemented, the calciner ponds closed and the hydraulic head removed from these units and leaking product sumps eliminated.

Contact telephone and e-mail numbers

(name) Linda Meyer  
(phone #) 206-553-6636  
(e-mail) meyer.linda@epa.gov

